

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Proposed

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Union Underwear Company, L.L.C.
Mailing Address: Fruit of the Loom Drive
Jamestown, KY 42629

Source Name: Union Underwear Company, L.L.C.
Mailing Address: Fruit of the Loom Drive

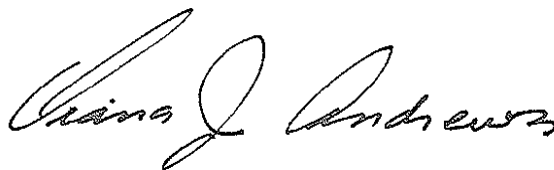
Source Location: Fruit of the Loom Drive, Jamestown, KY 42629

Permit Number: V-05-052
Source A. I. #: 3894
Activity #: APE 20050003
Review Type: Title V/Synthetic Minor-Construction-Operating
Source ID #: 21-207-00017

Regional Office: London
875 S. Main St.
London, KY 40741
(606) 878-0157

County: Russell

Application July 29, 2005
Complete Date: September 5, 2005
Issuance Date: March 24, 2006
Revision Date: NA
Expiration Date: March 24, 2011



**John S. Lyons, Director
Division for Air Quality**

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Rev #	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
----	O-90-069	?	4/30/90	10/22/90	Operating Permit
1	V-00-030	50697	2/1/1999	2/20/2001	Title V/Syn Minor
2	V-05-052	APE20050003	9/05/2005	3/24/2006	Renewal/Construction

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**Emissions Unit: 01 (EP01) - Residual No 6 Oil -Fired Indirect Heat Exchanger****Description:****Keeler NB # 5425**

Standby Boiler, Fuel Heated to 190 degree F and pumped into Boiler

Controls: None

Rated Capacity: 60 mmBtu/hr

Constructed: 1981

Applicable Regulations:

401 KAR 59:015, New indirect fired heat exchangers, applicable to an emissions unit with a rated capacity less than 250 mmBtu/hr which commenced on or after April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.367 lb/mmBtu based on a three-hour-average. The permittee may assure compliance with the particulate allowable by calculating emissions using the following formula:

*No. 6 fuel-oil - SCC 1-02-004-01**PM Emissions (lb/mmBtu) = (U.S. EPA approved or AP-42 emission factor: [(9.19(S) + 3.22) lbs/1000 gallons] ÷ (heating value from fuel analysis in mmBtu/1000 gallons) where S is the percent weight sulfur in the fuel oil.*

- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot

- c. Pursuant to 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 1.44 lb/mmBtu based on a twenty four-hour average. The permittee may assure compliance with the sulfur dioxide allowable by calculating emissions using the following formula:

*No. 6 fuel-oil - SCC 1-02-004-01**SO2 Emissions (lb/mmBtu) = (U.S. EPA approved or AP-42 emission factor: [(157(S) lb/1000 gallon] ÷ (heating value from fuel analysis in mmBtu/1000 gallons) where S is the percent weight sulfur in the fuel oil.*

- d. The annual emission and fuel usage limits listed shall be based on emissions and fuel usage during any consecutive twelve (12) month total.
- e. See Section D.

SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

- a. Pursuant to 401 KAR 59:015, Section 8, particulate, sulfur dioxide and visible emission limitations specified herein shall be measured by EPA Reference Methods 5,6 and 9 respectively, federal regulation 40 CFR 60, Appendix A.
- b. The permittee shall conduct at least one performance test for particulate matter (PM), opacity, and sulfur dioxide (SO₂) emissions within six months following the issuance of the final permit.
- c. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the heating value and sulfur content of #6 fuel oil combusted. The permittee may use fuel supplier certification to meet this requirement. The fuel supplier certification shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of # 6 fuel oil as specified in the regulation.
- b. Emissions of each criteria pollutant shall be calculated each month using emission factors, fuel usage rates, fuel average content of sulfur and heat. [Refer to Section D].
- c. The permittee shall monitor the amount of fuel combusted on a daily basis.

5. Specific Record Keeping Requirements:

- a. Records of fuel burned shall be maintained on a daily basis.
- b. Records of supplier certification of #6 fuel oil for sulfur content and heat content for each shipment shall be maintained
- c. The permittee shall maintain records of the monthly and rolling twelve (12) month regulated pollutants emissions. [Refer to Section D].

6. Specific Reporting Requirements:

- a. The permittee shall submit semiannual reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the fuel oil combusted during that period to the Kentucky Division for Air Quality London Regional Office.
- b. See Section F

7. Specific Control Equipment Operating Conditions:

See Section E.

SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emissions Unit: 02 (EP02) - Coal – Fired Indirect Heat Exchanger****Description:****Vogt Boiler # 36103**

Spreader stoker, coal-fired unit equipped with mechanical collectors, incorporated with fly ash re-injection system

Particulate matter control: 99% Zurn baghouse

Sulfur dioxide control: 67% efficient custom designed scrubber

Continuous Rated Capacity: 74.3 mmBtu/hr

Construction: 1987

Applicable Regulations:

401 KAR 59:015, New indirect fired heat exchangers, applicable to an emissions unit with a rated capacity less than 250 mmBtu/hr which commenced on or after April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.30 lb/mmBtu based on a three-hour-average. The permittee may assure compliance with the particulate allowable by calculating emissions using the following formula:

Coal- SCC 1-01-002-04

PM Emissions (lb/mmBtu) from combustion of coal = [(lbs / ton controlled emission factor from most recent stack test) / (heating value from fuel analysis mmBtu/ton)] x [1-(baghouse control efficiency/100)].

- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.

- c. Pursuant to 401 KAR 59:015, Section 5(1)(c) Sulfur dioxide emissions shall not exceed 1.2 lb/mmBtu based on a twenty four-hour average. The permittee may assure compliance with the sulfur dioxide allowable by calculating emissions using the following formula:

Coal- SCC 1-01-002-04

SO2 Emissions (lb/mmBtu) from combustion of coal = [(38S lbs / ton) / (heating value from fuel analysis mmBtu/ton) where S is the percent weight sulfur in the coal.] x [1-(scrubber control efficiency/100)].

- d. The annual emission limits listed shall be based on emissions and coal usage during any consecutive twelve (12) month total.
- e. See Section D.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

- a. Pursuant to 401 KAR 59:015, Section 8, particulate, sulfur dioxide and visible emission limitations specified herein shall be measured by EPA Reference Methods 5,6 and 9 respectively, 40 CFR 60, Appendix A.
- b. The permittee shall conduct at least one performance test for particulate matter (PM), opacity, and sulfur dioxide (SO₂) emissions within six months following the issuance of the final permit.
- c. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

4. Specific Monitoring Requirements:

- a. Emissions of regulated pollutants shall be calculated each month using emission factors, fuel usage rates, and average fuel sulfur heat content. [Refer to Section D]
- b. The permittee shall monitor the heating value, ash and sulfur content of the coal by taking a weekly composite sample from the coal pile that is representative of the coal combusted in the boiler.
- c. The permittee shall monitor the amount of fuel combusted on a daily basis.
- d. Wastewater scrubbing liquid flow rate (inlet) shall be greater than 400 gallons per minute on a 24-hour average.
- e. Scrubber inlet liquid pH shall be greater than 9 on a 24-hour average.

5. Specific Record Keeping Requirements:

- a. Pursuant to 401 KAR 52:020, records including those documenting the results of each compliance test, shall be maintained.
- b. Pursuant to 401 KAR 59:005, Section 3(2), the permittee shall maintain records of occurrence and duration of startup, shutdown or malfunction of the air pollution control equipment.
- c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of the scrubber inlet liquid flow rate and pH.
- d. Records of the heating value, ash and sulfur content of the weekly composite coal sample shall be maintained.
- e. Records of the amount of coal fuel burned shall be maintained on a daily basis
- f. The permittee shall maintain records of the monthly and rolling twelve (12) month regulated pollutants emissions.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

- a. The permittee shall submit semi-annual reports of the weekly composite coal samples and a certified statement signed by the owner or operator of the affected facility that the records of the composite sample analysis submitted represent the fuel combusted during that semi-annual period to the Kentucky Division for Air Quality London Regional Office.
- b. See Section F

7. Specific Control Equipment Operating Conditions:

- a. The scrubber (uses high pH bleach and dye wastewater) with venturi quenching section and the baghouse shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with the manufacturer's specifications and/or standard operation practices.
- b. Records regarding the maintenance of the control equipment shall be maintained.
- c. See Section E of the general conditions for additional requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 03 (EP03) - Natural Gas or #6 Oil-Fired Indirect Heat Exchanger

Description:

Nebraska D2570 Boiler

Natural Gas or #6 Oil Fired Boiler equipped with low NOx burners

Continuous Rated Capacity: 95 mmBtu/hr

Construction: 2006

Applicable Regulations:

401 KAR 59:015, New indirect fired heat exchangers, applicable to an emissions unit with a rated capacity less than 250 mmBtu/hr which commenced on or after April 9, 1972.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, Standards of Performance for small industrial-commercial-institutional steam generating units, applies to each steam generating unit commenced after June 9, 1989 that has a maximum design heat input capacity between 10mmBtu/hr and 100mmBtu/hr.

1. Operating Limitations:

Pursuant to 40 CFR 60.42c, fuel oil that contains greater than 0.5 weight percent sulfur shall Not be combusted.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.268 lb/mmBtu based on a three-hour-average. Compliance with particulate emission limitation while burning No. 6 fuel oil may be demonstrated by the operation and routine maintenance of the continuous opacity monitor equipment, such that the opacity does not exceed the upper limit of the indicator range developed from continuous opacity monitor (COM) data collected during stack tests. If five (5) percent of COM data recorded in calendar quarter shows excursions from the indicator range, the permittee shall contact the Division within thirty (30) days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions, which resulted in excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.

Compliance demonstration for fuel oil:

No. 6 fuel-oil - SCC 1-02-004-01

PM Emissions (lb/mmBtu) = (U.S. EPA approved or AP-42 emission factor: [10 lbs/1000 gallons] ÷ (heating value from fuel analysis in mmBtu/1000 gallons) where S is the percent weight sulfur in the fuel oil.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations: (continued)**

- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot. The permittee may use COM in determining compliance with opacity.
- c. Pursuant to 40 CFR 60.43c (c), while burning oil no operator or owner shall cause to be discharged into the atmosphere from that facility any gases that shall exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The permittee may use COM in determining compliance with opacity.
- d. Pursuant to 401 KAR 59:015, Section 5(1)(c) Sulfur dioxide emissions shall not exceed .829 lb/mmBtu based on a twenty four-hour average. While burning fuel oil, compliance with the allowable sulfur dioxide standard may be demonstrated by calculating sulfur dioxide emissions using fuel oil usage rates, fuel analysis, and emission factor information:
No. 6 fuel-oil - SCC 1-02-004-01
$$SO_2 \text{ Emissions (lb/mmBtu)} = (\text{U.S. EPA approved or AP-42 emission factor: } [(157(S) \text{ lb/1000 gallon}] \div (\text{heating value from fuel analysis in mmBtu/1000 gallons}) \text{ where } S \text{ is the percent weight sulfur in the fuel oil.}$$
- e. While burning natural gas, this unit is considered to be in compliance with PM, SO₂ and opacity standard.
- f. The annual emission and fuel usage limits listed shall be based on emissions and fuel usage during any consecutive twelve (12) month total.
- g. See Section D.

3. Testing Requirements:

- a. Pursuant to 401 KAR 59:015, Section 8, particulate, sulfur dioxide and visible emission limitations specified herein shall be measured by EPA Reference Methods 5,6 and 9 respectively, 40 CFR 60, Appendix A.
- b. The permittee shall conduct at least one performance test for particulate matter (PM), opacity, and sulfur dioxide (SO₂) emissions while combusting No. 6 fuel-oil within six months following the issuance of the final permit. To show compliance with 40 CFR 60, subpart Dc the permittee shall follow procedures listed in 40 CFR 60.44c(h). The upper limit of the indicator range shall be developed from the COM data collected during the stack tests.
- c. The permittee shall read weekly, when the unit is burning fuel-oil and weather permitting, the opacity of emissions using U.S. EPA Reference Method 9. Alternatively, the permittee may use COM in determining compliance with opacity.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the heating value and sulfur content of #6 fuel oil combusted. The permittee may use fuel supplier certification to meet this requirement.
- b. The permittee shall monitor the amount of each fuel combusted on a daily basis.
- c. Emissions of each regulated pollutant shall be calculated each month using emission factors, fuel usage rates, average fuel sulfur content and heat content. [Refer to Section D].
- d. Pursuant to 401 KAR 52:020, and 40 CFR 60, Subpart Dc, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM).
- e. Pursuant to 401 KAR 59:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrate compliance with Performance Specification 1 of 40 CFR 60, Appendix B, as requested by the Division for Air Quality.
- f. Pursuant to 401 KAR 59:005, Section 3 (5), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 59:005, Section 3, for the continuous monitoring systems during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [401 KAR 52:020]

5. Specific Record Keeping Requirements:

- a. Records of each fuel burned shall be maintained on a daily basis.
- b. Records of supplier certification of #6 fuel oil for sulfur content and heat content for each shipment shall be maintained.
- c. The permittee shall maintain records of the monthly and rolling twelve (12) month total regulated pollutants emissions. [Refer to Section D].
- d. The permittee shall maintain records of the COM data and the number of excursions above the indicator range, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

- a. The permittee shall submit semi-annual reports including the fuel supplier certification and a certified statement signed by the owner or operator of the affected facility that the records of the fuel supplier certifications submitted represent the fuel combusted during that period to the Kentucky Division for Air Quality London Regional Office.
- b. See Section F

7. Specific Control Equipment Operating Conditions:

See Section E.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 04 (EP04) - Natural Gas-Fired Dryers (Includes 5 units)

Description:

Tube-Tex, Ultra III, Model 425 Burner- Dryer #1,2,3&4 installed 2003 to 2005 & Santex, Model 415 Burner- Dryer #5 installed 2003

Combined capacity 2.65 million lbs/week (combined total dry weight) cloth. (all dryers combined 57.5 mmBtu/hr.)

Applicable Regulations:

401 KAR 59:010, New Process operations, applicable to an emission unit commenced on or after July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:010, Section 3(1)(a), any continuous emissions into the open air shall not equal or exceed 20% opacity based on a six-minute-average.
- b. Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions into the open air shall not exceed $[17.31(P)^{0.16}]$ lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by using the following equation:

$$\text{PM Emissions (lbs/hour) from cloth drying} = (\text{AP-42 emission factor}) \times (\text{cloth processed averaged weekly in tons/hour})$$

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a weekly basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b) The permittee shall monitor the cloth processing rate and hours of operation on a weekly basis.

5. Specific Record Keeping Requirements:

The permittee shall maintain the record of cloth processed and hours of operation on a quarterly basis.

6. Specific Reporting Requirements:

See Section F

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and qualitative visible emission evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any conservative actions taken for any abnormal visible emissions.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Coal Handling System: 24,000 tpy	401 KAR 59:010
2. Ash Handling System: 1,700 tpy	401 KAR 59:010
3. Cloth Dryer (7) 60,000 tpy Cloth	401 KAR 59:010
4. Bleach Range (2) 18,000 tpy Cloth	401 KAR 63:022
6. Dye Becks (34) 65,000 tpy Cloth	401 KAR 63:022
7. Pads (7) 61,320 tpy Cloth	401 KAR 59:010
8. Finishers (16) 77,000 tpy Cloth	401 KAR 59:010
9. Nappers (1) 2,666 tpy Cloth	401 KAR 59:010
10. Hydrogen Peroxide Tank 10,000 Gallons	401 KAR 63:022
2. Acetic Acid Tank 20,000 Gallons	401 KAR 63:022
3. Brine Tank Tank 22,500 Gallons	NA
4. Softener Tank 13,000 Gallons	401 KAR 63:022
5. Wetout 8,000 Gallons	401 KAR 63:022
7. Calgon 6,000 Gallons	NA
8. No. 6 Fuel Tank 108,000 Gallons	NA
9. Part Washer (7) 3,000 GPY	NA

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate, sulfur dioxide and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. In order to preclude the applicability of 401 KAR 51:017, (Prevention of Significant Deterioration of Air Quality) source wide total emissions of each regulated air pollutant from all the emission units including the insignificant activities, shall not exceed 225 tons per year during any consecutive twelve (12) month total. The permittee shall assure compliance with these limitations by tracking and monitoring fuel usage and hours of operation of the units whereby calculations for emissions from the units using AP-42 emission factors or engineering factors approved by the Division are made. The permittee shall for each emission unit track and maintain a monthly total and a twelve consecutive month total for each of the regulated air pollutants to assure compliance with this limitation.
4. Compliance with the annual regulated pollutants emission limitation shall be determined by adding the emissions from the combustion units (indirect heat exchangers), the gas-fired dryers and the insignificant activities for any twelve (12) consecutive months total.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Particulate emission from the indirect heat exchanger will be controlled by a bag-house with a proposed efficiency of 99 %. Sulfur dioxide emissions will be controlled by a wet scrubber with a minimum proposed efficiency of 67 %. This scrubber will utilize the plant's wastewater containing dye and bleach from the processing fabric. Mist eliminators will be provided in the wet scrubber to minimize moisture carryout.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
London Regional Office
875 S. Main St.
London, KY 40741

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points (EP03) in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test***

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None